

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. -24 (Canceled)

25. (Currently amended) A method of identifying a GH/IGF-1 axis direct antagonist, the method comprising:

a) providing a small molecule that is obtained by chemically modifying an agonist of a GH/IGF-1 axis component selected from the group consisting of GHRH, GHRH-R, GHS, GHS-R, GH, GH-R, IGF-1, IGF-1R, PI(3) kinase, PDK-1, Akt-1, Akt-2, [[or]] and Akt-3 while retaining a structure of the agonist that is capable of a physical aspect of the interaction of the agonist with the component or that is selected for structural similarity to an agonist of GHRH, GHRH-R, GHS, GHS-R, GH, GH-R, IGF-1, IGF-1R, PI(3) kinase, PDK-1, Akt-1, Akt-2, or Akt-3;

b) evaluating activity of GHRH, GHRH-R, GHS, GHS-R, GH, GH-R, IGF-1, IGF-1R, PI(3) kinase, PDK-1, Akt-1, Akt-2, or Akt-3 *in vitro*, in a cell, or in an organism in the presence of the small molecule, and

c) identifying the small molecule as a GHRH, GHRH-R, GHS, GHS-R, GH, GH-R, IGF-1, IGF-1R, PI(3) kinase, PDK-1, Akt-1, Akt-2, or Akt-3 antagonist wherein the small molecule antagonizes the activity of GHRH, GHRH-R, GHS, GHS-R, GH, GH-R, IGF-1, IGF-1R, PI(3) kinase, PDK-1, Akt-1, Akt-2, or Akt-3, thereby providing a GH/IGF-1 axis direct antagonist.

26. (Original) The method of claim 25 wherein the evaluating comprises a cell-free assay or a cell-based assay.

27. (Previously presented) The method of claim 25 wherein the evaluating comprises administering the small molecule to an adult organism.

28. (Original) The method of claim 27 wherein the organism has normal IGF-1 levels prior to the administering.

29. (Previously presented) The method of claim 27 wherein a cohort of adult organisms are treated and evaluated, each organism of the cohort characterized by normal IGF-1 levels prior to the treating.

30. (Previously presented) The method of claim 27 wherein the evaluating comprises evaluating GH or IGF-1 levels, and decreased levels of GH or IGF-1 identifies the small molecule as an antagonist.

31. - 35. (Cancelled)

36. (Previously presented) The method of claim 25, wherein the small molecule is combined with a pharmaceutically acceptable carrier.